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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,114	03/21/2001	Ola Hugosson	3782-0112P	8104

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EXAMINER

SHENG, TOM V

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/813,114	HUGOSSON ET AL.	
	Examiner	Art Unit	
	Tom V Sheng	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-17 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 7, 8 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6, 7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 3, 9, 13, 15, 17, 20, 21, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The word "character" can mean any symbol in the broad sense or just alphabets in the narrow sense per the Merriam-Webster's Collegiate Dictionary. Since the specification indicates the use of characters as alphabets (figure 5b), changing the term from "character" to "alphabet" is requested.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

¶ 7.12 Rejection under 35 U.S.C 102(e), Patent Application Publication or Patent to Another with Earlier Filing Date, in view of the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for

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purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Dymetman et al. (US Patent 6330976 B1).

As for claims 15 and 20, Dymetman teaches an apparatus for electronically transmitting handwritten information (a pointer with image input device; figure 8; column 15, lines 15-28; or figure 11, column 16, line 66 - column 17, line 21) comprising: a reading head adapted to optically record images from a surface (figure 8; camera 802); a memory (memory 806); means for converting the recorded image to at least one position and storing the position in memory based on a position-coding pattern contained in the recorded image which codes at least one position (frame grabber 804 and an image decoding software package, whose output can be a <pid, loc> pair, with loc reads on claimed position; column 15, line 29 - column 16, line 10); means for converting the recorded image to at least one character and storing the character in the memory based on an address-coding pattern contained in the recorded image which codes at least one character (frame grabber 804 and an image decoding software package, whose output can be a <pid, loc> pair, with the pid provides an Internet address and reads on claimed character(s); as long as the pid is coded to uniquely pointing to a particular address, it can be coded in any combination of characters, digits, or other symbols); and means for transmitting at least part of positions stored in the memory to an address corresponding to characters stored in memory (network communication software and network connection hardware that send the loc information

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to the Internet address designated by the pid; column 10, lines 50-61). See column 16, line 66 - column 17, line 66 for further related information. Further, it is patentively indistinct whether the address corresponds to only characters or any other combination of symbols as long as the address can be uniquely identified and communicated with.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 10-14, 16-17, 19, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman et al. (US Patent 6330976 B1) in view of MacWilliams et al. ("Pseudo-Random Sequences and Arrays" Proceedings of the IEEE, Vol. 64, No. 12, December 1976).

As for claims 1 and 22, Dymetman teaches a product for electronic transmission of handwritten information (a pointer with image input device; figure 8; column 15, lines 15-28; or figure 11, column 16, line 66 - column 17, line 21), comprising: at least one writing area for the handwritten information (figures 3, 5A, 5B), wherein the writing area comprises a position-coding pattern comprising a plurality of first symbols (markings 210 within each cell or zone 202 that represents a location code within the page; column 12, lines 30-33, lines 42-46) and wherein an position area of a predetermined first size (size and position are defined by the cell borders; column 12, lines 34-35) of

the position-coding pattern unambiguously defines a position on the product; and an address area indicating an address to which the handwritten information is to be sent, wherein the address area comprises an address-coding pattern comprising an plurality of second symbols (markings 208 within each cell or zone 202 that represents a page-identifier; column 12, lines 30-33, lines 39-41) and wherein an arbitrary address portion of a predetermined second size of the address-coding pattern (size and positioning of the address portion are defined by the cell borders; column 12, lines 34-35) unambiguously defines part of the address.

Further, Dymetman teaches that information captured by pointer (figure 2, element 502) would be sent to a predefined address router, which would then determine the Internet address based on the page-identifier, and send the location codes to the Internet address (column 10, lines 50-61). This reads on claimed "an address to which the handwritten information is to be sent". See columns 8, line 35 - column 10 for further related information.

Dymetman's position area and address portion are defined by the cell borders within the writing area and is thus not arbitrary. On the other hand, MacWilliams teaches a unique property of pseudo-random sequences and arrays called window property in which $2^{k_1 k_2} - 1$ occurrences of a $k_1 \times k_2$ array within would be unique (page 1716, lines 1-9). One of ordinary skills in the art would recognize the benefit of eliminating cell borders and in addition a higher resolution by incorporating the use of pseudo-random sequence in coding pattern. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate pseudo-

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random sequencing of MacWilliams into Dymetman's invention, thus allowing a higher resolution capture of handwritten information.

As for claim 2, since Dymetman's pid area and loc area are separated in each cell, the size of the pid area and the size of the loc area are independent from each other.

As for claim 3, it is patentively indistinct whether the address corresponds to only characters or any other combination of symbols as long as the address can be uniquely identified and communicated with.

As for claim 4, the further defining of a communication medium is not patentively distinct. It's naturally needed when more than one communication medium is to be used.

As for claim 5, the loc position is defined by a set of X and Y coordinates (column 13, lines 15-19).

As for claim 6, Dymetman's pid area's individual columns read on sequence portion, markings 208 read on second symbols, any number of columns reads on the arbitrary address portion, and individual cell 202's number of columns reads on a predetermined number of sequence portions of a predetermined length, with each column length corresponds to the predetermined length of each sequence portion.

As for claim 10, it is patentively indistinct whether the symbol size of the address-coding pattern and the symbol size of the position-coding pattern are same or different, since the address pattern separates from the position pattern.

As for claim 11, the mere interspace difference does not make it patentively distinct, especially when the two patterns separate from each other.

As for claim 12, the further defining of a public key for address decoding is not patentively distinct. It's merely a security feature.

As for claim 13 and 14, the mere division of address area into a plurality of code fields is not patentively distinct.

As for claim 16, Dymetman teaches the use of a button, which upon clicking would signal the camera to capture an image (column 9, lines 10-15). The idea is obvious to be applicable to a pen point as a pressure switch to one of ordinary skill in the art.

As for claims 17 and 21, the mere extra feature of allowing only positions of writing area defined by the address area to be transmittable is not patentively distinct.

As for claim 19, the mere extra feature of transmitting an identification number is not patentively distinct.

Allowable Subject Matter

7. Claims 7-8, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter: Subject matter relates to arbitrary area of pattern of a predetermined size that determines part of the address, and further each arbitrary area corresponds to one of a predetermined number of sequence portion. Moreover, each sequence portion as a subsequence determines a sequence value that corresponds to the position of the subsequence in the sequence, and also the difference in sequence value between subsequences is constant. These features are not taught or suggested by prior arts of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V Sheng whose telephone number is (703) 305-6708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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TS

January 22, 2003


KENT CHANG
PRIMARY EXAMINER